

Integrating Podcasting into the Classroom

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ABSTRACT

This paper offers some reflections on what it is like to use podcasting in the online setting, teaching political science. It provides a definition and description of how it is done. Through a review of the literature, it presents the pros and cons of podcasting, its uses in the classroom, some thoughts on how it can be improved, views on its limitations, and some general observations about podcasting in the context of using new technologies in the classroom.

INTRODUCTION

Although certain communication tools, like podcasting, have been in use on the Internet for many years, they are relatively new to academia. It started with Duke University in 2004 when they issued iPods to all entering freshmen students and their teachers and began podcasting as a way of recording lectures, language exercises, and supplemental materials in a wide range of courses (Harris-Wolff 2007). Now the practice is more widespread with universities such as Berkeley, Abilene Christian, Case Western Reserve, and Central Michigan following suit and the University of Virginia and Arizona State initiating pilot programs (Gray 2009).

The inclusion of podcasting and other new technological tools by software vendor, Blackboard in its 9.0 version has helped expand the use of this device to many others in academia. Blackboard provides a platform for creating and storing podcasts and provides a system of easy access for students to download these podcasts and listen to them on a portable player or their computer.

In an effort to encourage podcasting in colleges and universities, Apple has developed iTunes University. This is a free service that allows college teachers to publicize and distribute their podcasts to a wider audience. It offers a broad range of lectures and talks that were recorded on college campuses throughout the U.S. The

continued expansion of iTunes U attests to the popularity of podcasting in the academic setting (Learn Out Loud 2007).

This paper offers some reflections on what it is like to use podcasting in online courses, teaching political science. It provides a definition and description of how it is done. Through a review of the literature, it presents the pros and cons of podcasting, its uses in the classroom, some thoughts on how it can be improved, views on its limitations, and some general observations about podcasting in the context of using new technologies in the classroom.

DEFINITIONS

Podcasting is the process of creating digital files (audio or video) designed to be played back on mobile devices such as an iPod, mp3 player, or cell phone. Through the services of podcasters such as iTunes, Zune, Juice, and Winamp new podcasts can be downloaded automatically and stored on the user's computer. This is accomplished using RSS or Really Simple Syndication. Students as subscribers automatically receive each new podcast without having to visit a particular site and download it separately. Students who do not install podcaster software can still listen or view the podcasts on their computers as long as they have an audio player, such as, Windows Media Player or RealPlayer (Lowe 2007).

Podcasting requires a minimum of hardware and software. The major hardware that is needed is a computer and a microphone. The best mics are those that plug into a

computer using a UBS port and have headphones to limit exterior noise. These are relatively inexpensive, running about \$50.

If a teacher uses Blackboard, no additional podcasting software is necessary. However, it may be preferable to use a popular software system called Audacity for recording podcasts. It is available online for free. It has more capabilities than Blackboard. With Audacity one can edit, remove noise, mix tracks, and add music. After recording in Audacity the podcast is saved as an mp3 file and uploaded to Blackboard.

With the necessary equipment in place, the next step is to prepare the content. Working from notes or an outline, a teacher can record a lecture, comments, or any supplemental materials he or she wishes to discuss with students. It probably works best to start with 15 or 20 minutes and then work up to longer podcasts.

Once they are recorded, podcasts are uploaded to Blackboard. Podcasts are stored on the Blackboard site and can be directly access by clicking on the name of the individual podcast. The Blackboard system has the convenience of allowing students access all the course podcasts in one place. These podcasts can be archived for use in future semesters when the course is taught again.

LITERATURE REVIEW

The literature suggests that podcasting is a potentially useful pedagogical tool because freshmen entering college in 2009 are technologically sophisticated. According to Duffy, podcasting is a technology that most college students already use, and can be effectively incorporated into both online and in-class courses (2008). Similarly, Lum

reported that 80% of entering college freshmen had at least one device that is suitable for receiving a podcast and at least half of these students have downloaded podcasts before coming to college (2006).

The literature suggests a number of uses for podcasts in the classroom. It is argued that they can be used for recording class lectures, interviewing guest speakers, and for assigning podcasts from other sources, such as, radio and television news outlets (Andrew 2008). They can also be used to record supplemental materials for the class, and review sessions before tests. It is also suggested that an appropriate use of technology is to have students create their own podcasts as a class project. There is also the possibility of employing audio recordings of textbooks that would enable students to listen rather than read books while walking or driving (Meng 2005).

Duke University's faculty used podcasts to disseminate course content and to record lectures, class discussions, and verbal feedback. The iPods were also used to record interviews, field notes, or other audio data; to provide audio content for students to study (such as music or vocabulary lists); and to store or transfer large multimedia files (Duke 2005). At American University, a faculty member used podcasting to deliver lectures to the students so that during class-time he could devote time to informed discussions, readings, and helping students (Leonard 2008).

The literature indicates that there are several advantages to using podcasting in the classroom. It is argued that podcasts can deliver lectures or supplemental materials for the course easily and conveniently. This technology allows students to learn when they want, where they want, and even while they are doing other things (Lee and Chan 2007). Students also can use podcasting as part of their learning experience. Using this

technology, students learn the material for the course, practice their presentation skills, and learn new information by listening to their peers' podcasts. In addition, podcasts are excellent for absent students to catch up on lectures missed. It can provide a "safety net" for those who cannot come to class for whatever reason (Wolsey 2009).

For online courses, podcasts enable students to hear the lectures in addition to reading the material for the course. Hearing the voice of the faculty member can create more connectivity between the students and the instructor. It can help personalize the course and remove the distance that is created by only having written messages from the instructor.

At the same time, podcasting in online courses can definitely benefit those students who are audio learners. Also, providing online students with podcasts is a low-cost and low-barrier solution for the delivery of course content without forcing students to search various websites for materials (Lee and Chan 2007).

The faculty and students at Duke University found the portable digital course content to be very convenient, reducing the need for physical materials for the course. They also liked the flexibility of podcasting, enabling students to learn when they wanted, and not just when the library or labs were open. The iPods were extremely useful for recording interviews, field notes, small group discussion, and for self-recording. Students also had greater interest in their class discussions and projects because they were able to use this technology (Duke University 2005).

In a study about the use of podcasting for distance learning, Lee and Chan (2007) found that most students had little if any technical problems downloading the course content. The students found the podcasts to have educational value, helping them learn

the material. The surprising results from this study were that most students did not use podcasting while mobile or multi-tasking, but preferred to listen to the podcasts using a desktop or laptop computer at home. At the same time, the students did not listen to the podcasts while driving or walking but at home at a specified time. In other words, students were not multitasking while listening to these podcasts, but treated them as part of their formal study time at home. Since many students listened to the podcast on their computers, they did not bother transferring the course materials to a portable player. Contrary to popular belief, they found it more convenient to listen at home than to use a portable player and listen to the podcasts while driving or doing something else.

In a study of students using supplemental podcasts for a traditional course, Dyson found that only 36% of surveyed students used the podcasts one or more times. Twenty-five percent of the students stated that they did not bother using them at all because they attended the lectures in person and took notes. The students that benefitted the most from the supplemental podcasts were foreign students who listened to the podcasts to help them overcome language difficulties (2009).

While there are several benefits to using this technology in college courses, there are also some disadvantages as well. Some students may not have a portable mp3 player or a computer at home to download the recordings. In addition, if students have a dial-up connection to the Internet, they may not be able to easily download these audio and video files. Even if students use campus computer labs, they may not have the privacy needed to listen to or even record their podcasts. It is also possible that a number of students will view podcasts of lectures as a substitute for attending class (Leonard 2008, Meng 2005).

Many faculty and students expressed concerns about the potential negative impact podcasts could have on class attendance (Duke University 2005).

In addition, Duke University discovered that it was difficult to measure whether using podcast technology positively impacted exam performance. Not only did some students not have well-recorded podcasts, the university had difficulty tracking whether the students used the recorded lectures. Duke also discovered various barriers and problems with using this technology within an academic setting. First, there were significant technical challenges integrating various systems for content storage, access, sharing and distribution. Second, there were problems dealing with content and sources of the podcasts. The university discovered that there are no systems in place for bulk purchase or licensing commercial mp3 audio content for academic use. In addition, not all the faculty had the technological equipment to record both audio and video files, and there were limited training resources available for those faculty and students who did not know how to use the technology.

Faculty at Duke also discovered that creating podcasts is time consuming. Even for those who know how to use the technology there is still a significant time commitment needed to create them. For example, it was estimated that a one and a half hour podcast lecture took at least 4 hours to script, record, edit, convert to mp3 format, and upload (Dyson, et al. 2009).

At Duke it was also discovered that some of the podcast recordings were not of sufficient quality for some academic settings. Both faculty and students found that the iPod recorded best from short distances and in small groups. (Duke University 2005)

Faculty-created podcasts also raises questions of ownership and control of these recordings. Faculty and universities need to clearly state who owns these podcasts as they have with other types of intellectual property. This is difficult because, unlike other types of intellectual property, podcasts are made available in contexts beyond the control of the university and the faculty member who created them. The intellectual property issue also raises questions about what students are able to do with these recordings after the course is over and if they can be used outside the university community (Meng 2005).

DISCUSSION AND CONCLUSION

Many scholars seem overly optimistic about the use of podcasting for academic purposes. For example, some say that mobile devices will engage students in active learning that will help them gain deep knowledge (Dyson, Litchfield, Lawrence, Raban, & Leijkekkers, 2009; Williams & Chinn, 2009; Richardson, 2009). In addition to promoting active learning, it is also suggested that new technologies will enable students to construct their own knowledge. This constructivist approach which has its roots in adult education, may not be the best method for traditional undergraduates who do not have the same skills and experiences of adult students. As Dyson (2009) discovered there were students doing case studies that did not have autodidactic competency. They also did not know what data to collect or how to incorporate it into their presentations. This suggests that even though the technology gives students new and unique opportunities to be creative, traditional undergraduates may not have enough content knowledge or other academic skills to be successful.

This latter point seems consistent with our experiences. Undergraduate students usually do not possess the subject matter knowledge necessary to engage in projects

that require them to produce their own podcasts. In courses where students are assigned to create podcasts, the objective is usually to enable students to practice their skills in analyzing information and communicating ideas. At best, these exercises may demonstrate students' technological literacy, but will not provide the best use of podcasting in the classroom. Class projects that showcase student involvement in technology may fall short of subject matter content and be examples of "technology for technology sake."

It should also be noted that much of the optimism about technology found in the literature is not accompanied by evidence of any positive impact of podcasting on learning outcomes. We know of no studies that measure the impact of podcasting on the learning process. Evidence is mainly impressions from students who say they are satisfied with the technology and think it is helpful when preparing for tests and faculty critics who believe it may have the effect of reducing the numbers of students who come to class.

While most students say that podcasting is not a deterrent to class attendance, it would be helpful to know if there is an adverse effect. This is important, because in our view listening to a podcast is not a substitute for the experience of being in the classroom. The classroom is much more than just listening to the teacher. It involves active learning through engagement with the teacher and other students.

Podcasting is probably more useful to students in an online class where they only have access to written materials. This is a problem because most students entering college are probably audio learners. They are used to listening to a teacher, taking notes, engaging in discussing, asking questions, and responding back with what they know on tests. Few

students are especially adept at reading alone for understanding. When students are required to rely mainly on information found in a textbook (this is the case in most online classes) they often do not do as well. Even written notes do not seem to be an effective tool.

Podcasting appears to be helpful. It seems to be a way for students to be closer to the classroom experience. It is a good supplement to the required readings. It is also a better way to engage the student, while at the same time allowing the teacher to express his or her personality, and humanity.

The major disadvantages of podcasting are the additional burdens it places on the teacher. Instructors need to acquire the hardware and software, learn the techniques, and develop the skills needed to produce an effective podcast. It takes a lot of extra time and effort.

The major difficulty is learning how to effectively produce a lecture using a microphone with a headset, sitting in front of your computer with no audience. At first, it seemed artificial, strained, and difficult to relax. My early attempts at podcasting sounded too formal without the humor, passion or opinions that make my classes engaging.

It took at least a semester of podcasting once a week before I was able to relax enough to be myself. During a recent podcast, I caught myself in a rage over corporate control of U.S. politics and realized that podcasting is now not much different than my traditional classroom.

It is also very time consuming. I have to condense lectures down from three hours to about an hour. They also have to be paced differently than in the classroom. It seems

best to work from an outline or script because it is necessary to avoid down time or getting off point. There is a considerable amount of time in the pre-production stage. Probably, because most of us do not have any background in the technology it seems to be more challenging than conducting classes in the traditional way. The experience described at Duke University seemed to be similar to my own. It takes several hours to produce a single hour of podcast time. If a teacher tries to make the podcast more engaging by adding music, audio or video clips, and edit-out portions of the recording the time is significantly increased.

The time factor is one of the reasons why many faculty members avoid using new technologies. They also shun technology because they consider it unlikely to improve student learning. Teachers who adopt new technology in the classroom have to avoid the opposite problem: becoming enamored with technology without the necessary skepticism concerning its ability to enhance the learning process.

As a practitioner of new technologies it is easy to get caught-up in the enthusiasm that is often generated around whatever is new. Students are often in awe of using high tech gadgets. Excitement about new technology produces what Mathew Roberts refers to as the WOW factor (Roberts 2008). It results in style over substance, a focus on the messenger not the message. More importantly, since most of us are enamored by high tech, we avoid asking the important questions about content delivered in the new way. We often fail to recognize that good teaching has to be about content not delivery systems.

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